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March 20, 1996

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W. -- Room 222
Washington, DC 20554

RECEIVED

MAR 20 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Re: Ex Parte Presentation
CC Docket No. 95-116 - Number Portability

Dear Mr. Caton:

At the request of Jason Karp of the Common Carrier Bureau's Policy and Program planning Division, excerpts of incremental cost studies, filed by NYNEX-New England with the Rhode Island Public Utilities Commission in 1995 and the New Hampshire Public Utilities Commission in 1993, are submitted for inclusion in the record of this proceeding.

The cost studies include analysis of the incremental costs associated with remote call forwarding and direct inward dialing, both proposed as interim local number portability solutions.

Two copies of this Notice are being submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Sincerely,

A handwritten signature in cursive script, appearing to read "F. S. Simone".

Frank S. Simone
Regulatory Division Manager
Federal Government Affairs

cc: Mr. Jason Karp

Attachment

No. of Copies rec'd
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022

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY, D/B/A NYNEX**STATE OF RHODE ISLAND****DOCKET NO. 2252**

Respondent: Paula L. Brown
Title: Managing Director

REQUEST: MCI Telecommunications Corporation, Set #1

DATED: December 8, 1995

ITEM: MCI 1-23

With respect to the testimony of NYNEX witness Paul I. Calabro, pages 49 - 51, please provide all costs of providing the interim number portability arrangements for RCF, DID, and INP (including, all supporting documents, including input and output sheets, and test descriptions of all models used.) Specifically, please provide:

- a) description of exactly what physical network components are included in the cost analysis;
- b) statement of to what extent the cost analysis is identical to or different from a comparable analysis of the costs of NYNEX's retail DID and RCF services;
- c) definition and description of all acronyms used in the cost analysis;
- d) description of the design and operation of and operation of subsidiary data sources and models used in the cost analysis;
- e) all work papers which underlay the summary cost and demand results, including SCIS and ACAR input assumptions and outputs.

RESPONSE:

- a) The remote call forwarding feature is comprised of software within the local serving office. DID trunks are comprised of trunking hardware and software, routing software and facilities from the serving central office to the

NET #112

Page 2
MCI 1-23
NET #112

location to be served. The INP network components consists of trunking hardware and software. The monthly recurring costs (see attachment), associated with RCF and DID trunks are \$.57 and \$11.70 respectively. These costs were developed in MCS VI, filed in Massachusetts in Docket 93-125. The Company believes that these costs provide a reasonable surrogate for Rhode Island. The Company has not performed a cost study for INP.

- b) The cost analysis of RCF and DID, yields a cost that applies to these services regardless of application.
- c) SCIS is an acronym for Bellcore's, "Switching Cost Information System", cpl cost and main cost factors are acronyms for capital cost and maintenance factors, Matl is an acronym for material, and Tech mix is an acronym for technology mix.
- d) SEIS is the only model used in the development of the cost associated with these functions. Subsidiary data sources are listed at the bottom of the attached cost study pages. Capital cost factors are derived based upon current depreciation, tax, and ROR rates. Maintenance factors are a function of expenses to investments, installation factors are a function of installation expenses to investments, and inflation factors refer to the telephone plant index (TPI), as determined by Joel Popkin and Company, Economic Consultants to the telephone industry.
- e) The costs and associated inputs are attached. NYNEX does not employ the ACAR system.

01/22/96 12:26 32 -#2082 - 919882214628

Attachment
MX 1-23
TAB E8
UNIT COSTS
PAGE 2 OF 2

MARGINAL COST STUDY
SPECIAL STUDY DOCUMENTATION

SERVICE: Remote Call Forwarding (RCF)

METHODOLOGY OF STUDY:

The methodology used to produce the incremental cost for RCF service was, first, to develop the incremental investment required to offer this service by technology; secondly, to convert these to annual costs and finally, to weight these results based upon the technology.

RESULT:

The annual cost for Remote Call Forwarding is \$6.85

DATA SOURCES:

SCIS
Capital Cost Factors
Maintenance Factors
Installation Factors
Inflation Factors

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32 - 62002 + 919082214628

NO. 455 P005

2 COSTS
RCF
ATTACHMENT 1

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ

**TAB E10
UNIT COSTS
PAGE 1 OF 2**

**MARGINAL COST STUDY
SPECIAL STUDY DOCUMENTATION**

SERVICE: DID - Per Trunk

METHODOLOGY OF STUDY:

The incremental cost for DID trunks was developed by, first determining the incremental investment per DID trunk by technology; secondly, by applying factors to determine annual capital and maintenance costs; thirdly, by weighting the results by technology.

RESULT:

The incremental annual cost per DID trunk is \$140.35

Data Sources:

**SCIS
Capital Cost Factors
Maintenance Factors**

TAB N10
UNIT COSTS
PAGE 2 OF 2

MARGINAL COST STUDY
SPECIAL STUDY DOCUMENTATION

SERVICE: DID - NUMBER STUDY

METHODOLOGY OF STUDY:

The incremental cost for a DID number group was developed by first, developing the incremental investment per number group by technology; secondly, applying a factor to produce annual capital costs; finally, weighting the results by technology.

RESULT:

The incremental annual cost per DID number group is \$3.06

Data Sources:

SCIS
Capital Cost Factors

3078
ATTACHMENT

DID NUMBER GROUPS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
SERVICE	SCIS	SCIS	INITIAL'D	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
TECH	INVEST	MAT'L	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST	INVEST
1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B
1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B	2B
2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A
3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B	3B
3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A
4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B
4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B	5B
5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A
TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL

NOTE:
IS AS SWISS INVESTMENTS ARE FROM THE 1994 MCA. 1A INVESTMENTS ARE FROM THE 1995 MCA.
DATA, DISCOUNT & INVESTMENTS ARE FROM CURRENT EIR OUTPUT.
ALL INVESTMENTS HAVE BEEN RELATED TO THE DOLLAR.
USED THE LATENT CAPITAL AND MAINTENANCE FACTORS.
TECHNOLOGY SPILT BASED FROM C & P FROM END OFFICE STUDY.

1993

NEW

HAMPSHIRE

INCREMENTAL

COST STUDY

INDEX

<u>Section/Content</u>	<u>Page</u>
I. Introduction	
A. General Information	3
B. Methodology Overview	5
C. Results	7
II. Services Studied	23
III. Unit Cost Driver Development	25
A. Loop	26
B. End Office	37
C. Interoffice Facilities	58
D. Tandem	78
IV. Special Studies	81
A. Intercept	82
B. Local Coin Usage	86
C. Public Telephone Equipment	89
D. Operator Handled	96
E. Directory Assistance	111
F. Bill Production and Inquiry	119
G. Private Line Nonrecurring Charges	130
H. Private Line Recurring Charges	152
I. Dual Element Service Charges	179
1. One-Time Charge for Discretionary Services	188
J. Auxiliary Services	
1. Touchtone	191
2. Custom Calling Services	194
3. Simplified Message Desk Interface	200
4. CENTREX Features	203
5. Direct Inward Dialing (DID)	209
K. Digital Data System (DDS) II	216
L. Superpath	221
M. Flexpath	238
N. Infopath	243
V. Demand Quantities	252
VI. Results	
A. Local Services	261
B. Toll Services	307
C. 800 Service	321
D. Public Service	325
E. Operator Handled	329
F. Private Line	335
G. Access Service	377
H. Centrex Service	381
VII. Appendix-Annual Cost Factors	390

SECTION I

INTRODUCTION

NEW HAMPSHIRE INCREMENTAL COST STUDY

Introduction

This introduction will:

- state the purpose of the Incremental Cost Study (ICS) and explain how the study is organized;
- present general information applicable to this incremental cost study;
- explain the methodology employed to produce incremental costs;
- define the demand component of the incremental cost of service study;
- display a summary of the incremental cost results produced by class of service.

The 1993 New Hampshire Incremental Cost Study (ICS) is provided in compliance with the New Hampshire Public Utilities Commissions' (NHPUC) Order No. 20,082, Docket 89-010/85-182, issued March 11, 1991.

The Company has incorporated into this study the NHPUC recommendations that were previously included in the 1990 issue of its ICS; a 15 year study period, a 3% annual line growth, a 70% initial fill factor on loop distribution and digital conversion costs associated with growth of end offices. Additionally, as directed by the NHPUC, the 1993 ICS is based on the Company's 1992 usage data. The analysis of loop concentrator costs also requested was considered but not studied by the Company since technological advancements in loop technology obviate the future placement of concentrators. A complete study of the Company's loop cost center has been included with the 1993 ICS reflecting the current technology and deployment of the loop plant.

To simplify review, this filing is organized into seven sections, in the same manner as the 1990 ICS. The first section provides an overview of the study, and serves as the introduction to the study and its methodology which is the same as the 1990 NHPUC approved ICS. Finally, a summary of results are provided with a comparison to those developed in the 1990 ICS.

NEW HAMPSHIRE INCREMENTAL COST STUDY**Introduction (Cont'd)**

Section II displays a list of the services studied and the criteria used for the inclusion of that service. There are three criteria used to determine the services studied in the 1993 ICS:

1. The service was included in the 1990 ICS;
2. The service generates more than \$25,000 in monthly revenue;
3. An order issued subsequent to the 1990 ICS that specified review of rates based on the 1990 ICS.

Section III provides cost center detailed information. Loop information is in Section III A. Section III B contains end office data. Section III C explains interoffice facilities and tandem is in Section III D.

Section IV explains the need for special studies. This section also contains the special studies methodology and results for Intercept, Local Coin Usage, Public Telephone Equipment, Operator Handled calls, Directory Assistance, Bill Production and Inquiry, Private Line Nonrecurring charges, Private Line Recurring charges, Dual Element service charges, Auxiliary Services (for example, Custom Calling Services, Touchtone, etc.) Digital Data Systems (DDS) II, Superpath, Flexpath and Infopath.

Section V provides demand quantity information integrated into the ICS.

Section VI contains ICS results by service. Section VI A has Local services results; Toll services results are contained in Section VI B; 800 service results are in Section VI C; Section VI D has Public service results; Operator Handled call results are in Section VI E; Section VI F has Private Line services results; Access services results are in Section VI G and Centrex service results are displayed in Section VI H.

Section VII is the Appendix which contains information about maintenance and capital cost factors.

SECTION I

GENERAL INFORMATION

NEW HAMPSHIRE INCREMENTAL COST STUDY**General Information**

This incremental cost filing is responding to the NHPUC Order No. 20,082 to provide an update of the 1990 ICS.

Incremental cost is a relatively straightforward notion: the incremental cost of a service is the change in cost resulting from a change in the quantity demanded of that service. For example, the incremental cost of a new home is the added cost incurred by the builder in its construction. It is also helpful to understand what incremental costs do not include. Incremental costs do not include historical, common or sunk costs. For example, the builder's salary is not an incremental cost of a new home, although subcontractor payments are. Incremental costs provide useful information from many different perspectives. Virtually every enterprise evaluates incremental cost in its decision making process. From an economic standpoint NET's incremental costs are the relevant costs for the pricing of telecommunications services.

Because the future is the relevant period for evaluating production and consumption decisions, incremental costs must be forward-looking in nature. This characteristic alone makes them estimates which are open to debate and discussion. Indeed, incremental costs are likely to change over time. For example, the availability of new and, as yet, unidentified technology could impact a firm's future/incremental costs of production.

Likewise, in capital intensive industries, like telecommunications, long run cost functions need to be considered so that the distortions which might arise from short term views can be overcome. For example, a short run view may indicate that there is sufficient switching capacity in place to accommodate growth throughout the next year. However, a longer term view could show that the demand in subsequent years would require the placement of new plant and investment. It could also occur that higher demand in the near term may require the placement of additional capacity in such a quantity that several additional years growth could be accommodated without subsequent placements.

In this second case a short term view would associate the entire additional investment with the near term quantity and, thereby, produce a higher investment value per unit than would a long run perspective on investment and demand. Telephone plant cost functions frequently exhibit this kind of lumpiness which can only be handled effectively via a long run perspective on cost and demand. Therefore, for certain aspects of this ICS investments and unit growth are projected out over a 15 year study period to levelize investment and demand. Actual investment and expense dollars for 1992 were trended to 1993.

NEW HAMPSHIRE INCREMENTAL COST STUDY

General Information (Cont'd)

Listed below is a generalized process for determining incremental cost by service.

1. Identify cost centers.
2. Identify cost drivers for each cost center.
3. Define tariff offerings in terms of cost drivers.
4. Describe and inventory existing equipment, facilities, and procedures to define existing capacity.
5. Define and select data sources and samples.
6. Integrate data into the study.
7. Translate service descriptions in terms of cost drivers.
8. Processing cost centers, various expenses, and special studies.
9. Documentation and processing cost center study results.

SÈCTION I

METHODOLOGY OVERVIEW

NEW HAMPSHIRE INCREMENTAL COST STUDY**Methodology Overview**

NET's general method for identifying and quantifying the incremental component of its costs revolves around the response to two questions:

1. Does a given investment/expense area have an incremental component of cost such that total cost will vary in some predictable and quantifiable way with future demand for NET's services?
2. If so, how will the investment/expense change with increases and decreases in demand?

Viewed in this context, incremental costs represent the change in cost associated with changes in demand. The relevant questions become: "How will we meet increased demand in the future? Is there sufficient capacity available? If not, what kind of plant will be added to meet this demand? How much plant will be added? and, How much will it cost?"

NET has selected an incremental cost method which focuses on the specific network and expense components of its operations. These components are termed cost centers. Each cost center is examined to determine, first, if its associated investment/expense is likely to be influenced in some predictable fashion by future demand changes, and second, the specific manner in which these values change. To accomplish this, demand cost drivers are ascribed to each incremental cost center to develop an incremental cost per cost driver unit.

The concept of the cost driver is essential to the ICS. In general, a cost driver is a fundamental product that causes cost to be incurred. In the ICS, cost drivers are those service elements which influence the future costs within a cost center. For example, the anticipated busy hour load drives the future requirements for end office and tandem switching.

The following are the cost centers for NET's incremental costs:

- Loop
- End Office
- Interoffice Facilities
- Tandem Office

NEW HAMPSHIRE INCREMENTAL COST STUDY

Methodology Overview (Cont'd)

Each of these cost centers has drivers which have direct and measurable impacts of future costs. The ICS further disaggregates the drivers into variables which often allow differentiation between services. The engineering of digital switches today is no longer based on an common busy hour. End office and tandem switching have been differentiated by hour of the day to develop costs for individual services and to allow comparisons of costs with the earlier issue of the ICS. The fiber digital loop technology engineered and planned for deployment by the Company since the previous ICS has evolved where the feeder plant characteristics are now largely insensitive to distance. Therefore, today's loop cost for a business or residence service is not differentiable to any appreciable amount.

The next step in the incremental cost process is to define each service element in terms of cost driver units. For example, if a loop connection is determined to be a cost driver, it is first necessary to determine whether a specific service will require one or more loop connections. Each service is reviewed to determine which cost drivers would be required to meet future demand as well as the quantity of drivers needed. Defining services in these terms is a critical element in the incremental cost method.

The final major step in the Incremental Cost Study method is combining the incremental unit cost per driver data and the service description data to produce an incremental cost for each service element.

NEW HAMPSHIRE INCREMENTAL COST STUDY

SERVICE: Custom Calling Services (Recurring)

INTENT OF STUDY: Determine the incremental monthly recurring costs associated with Custom Calling Services.

METHODOLOGY OF STUDY:

Determine the incremental central office switching investments required to provide Custom Calling Services. Calculate the incremental monthly costs based on those investments.

RESULTS:

The incremental monthly recurring costs for Custom Calling Services are displayed below:

Call Waiting	\$ 0.04
Call Forwarding Variable	\$ 0.06
Call Forwarding II	
Call Forwarding-Busy Line	\$ 0.00
Call Forwarding-Does Not Answer	\$ 0.05
Call Forwarding-Busy Line/Does Not Answer	\$ 0.05
Three-Way Calling	\$ 0.10
Speed Calling-8 Codes	\$ 0.02
Speed Calling-30 Codes	\$ 0.04

SOURCE:

Switching Cost Information System (SCIS)
Telephone Plant Indices
Capital Cost Factors
Maintenance Factors
Installation Factors

NEW HAMPSHIRE INCREMENTAL COST STUDY

Custom Calling Services comprise the following:

1. Call Waiting - signals the customer talking on the line that another call has been placed to the line. The customer may answer the second call and alternate between the calls by manipulating the switch hook.
2. Call Forwarding Variable - permits a customer to forward all incoming calls to another preselected telephone number. The customer activates the service by dialing a code and the telephone number of the line to which the calls are to be forwarded.
3. Call Forwarding II - provides for the automatic routing of incoming calls to a preselected telephone number when the called number is busy and/or does not answer within a predetermined number of rings. The following Call Forwarding II options are available:
 - A. Call Forwarding-Busy Line
 - B. Call Forwarding-Does Not Answer
 - C. Call Forwarding-Busy Line/Does Not Answer
4. Three-Way Calling - enables a customer to establish a talking connection involving himself and two other parties. The customer, by switch hook operation, is able to place an existing call on hold and dial the telephone number of a third party.
5. Speed Calling-8 Codes - allows a customer to call a predesignated seven or ten digit telephone number by dialing a one-digit code. A maximum of 8 predesignated telephone numbers can be stored.
6. Speed Calling-30 Codes - allows a customer to call a predesignated seven or ten digit telephone number by dialing a two-digit code. A maximum of 30 predesignated telephone numbers can be stored.

NEW HAMPSHIRE INCREMENTAL COST STUDY

The incremental cost studies for each of the custom calling services were performed using the following steps:

1. Separately identify the incremental central office switching investment required for each of the Custom Calling Services. Investments were determined using the Switching Cost Information System.
2. Trend the investments to 1993 using the Telephone Plant Index.
3. Apply the appropriate capital and maintenance cost factors to determine the annual cost for the service. Divide the annual cost by 12, resulting in the monthly cost.

The calculations used to determine the incremental costs for Custom Calling Services are displayed on the following attachments.

NEW HAMPSHIRE INCREMENTAL COST STUDY

SERVICE : CUSTOM CALLING FEATURES

A	B	C	D	E	F	G	I	TOTAL	TECH	ANNUAL	MONTHLY
SERVICE	SCIS	SCIS	1993	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	MIX	COST	COST
CALL WAITING	TECH	MAT'L	MAT'L	INSTAL'D	CPTL.COST	CPTL.COST	MAINT	MAINT			
	1A	\$4.98	\$5.28	\$12.98	0.1634	\$2.18	0.0607	\$0.78	\$2.89	0.1280	\$0.35
	2B	\$2.96	\$3.38	\$8.24	0.1634	\$1.35	0.0607	\$0.50	\$1.85	0.0680	\$0.11
	DMS10	\$0.00	\$0.00	\$0.00	0.1491	\$0.08	0.0269	\$0.00	\$0.00	0.0480	\$0.00
	5E	\$0.05	\$0.05	\$0.88	0.1491	\$0.01	0.0269	\$0.00	\$0.01	0.7880	\$0.01
									TOTAL	\$0.47	\$0.04
A	B	C	D	E	F	G	I	TOTAL	TECH	ANNUAL	MONTHLY
SERVICE	SCIS	SCIS	1993	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	MIX	COST	COST
CALL FORWARDING	TECH	MAT'L	MAT'L	INSTAL'D	CPTL.COST	CPTL.COST	MAINT	MAINT			
	1A	\$4.44	\$4.78	\$11.67	0.1634	\$1.91	0.0607	\$0.71	\$2.61	0.1280	\$0.31
	2B	\$1.21	\$1.38	\$3.37	0.1634	\$0.55	0.0607	\$0.20	\$0.75	0.0680	\$0.05
	DMS10	\$0.17	\$0.17	\$0.29	0.1491	\$0.04	0.0269	\$0.01	\$0.05	0.0480	\$0.00
	5E	\$1.51	\$1.52	\$2.61	0.1491	\$0.39	0.0269	\$0.07	\$0.40	0.7880	\$0.36
									TOTAL	\$0.72	\$0.06
A	B	C	D	E	F	G	I	TOTAL	TECH	ANNUAL	MONTHLY
SERVICE	SCIS	SCIS	1993	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	MIX	COST	COST
THREE-WAY CALLING	TECH	MAT'L	MAT'L	INSTAL'D	CPTL.COST	CPTL.COST	MAINT	MAINT			
	1A	\$4.85	\$5.22	\$12.74	0.1634	\$2.08	0.0607	\$0.77	\$2.86	0.1280	\$0.34
	2B	\$2.30	\$2.62	\$6.40	0.1634	\$1.05	0.0607	\$0.39	\$1.43	0.0680	\$0.09
	DMS10	\$0.69	\$0.70	\$1.19	0.1491	\$0.18	0.0269	\$0.03	\$0.23	0.0480	\$0.01
	5E	\$3.18	\$3.21	\$5.49	0.1491	\$0.82	0.0269	\$0.15	\$0.97	0.7880	\$0.75
									TOTAL	\$1.19	\$0.10

NEW HAMPSHIRE INCREMENTAL COST STUDY

A	B	C	D	E	F	G	H	I	J	K	L	M
		SCIS	1993		ANNUAL	ANNUAL	ANNUAL	ANNUAL	TOTAL			
	SCIS	MAT'L	MAT'L	INSTAL'D	CPTL.COST	CPTL.COST	MAINT	MAINT	ANNUAL	TECH	ANNUAL	MONTHLY
SERVICE	TECH	INVEST	INVEST	INVEST	FACTOR	(D+E)	FACTOR	COST	COST	MIX	COST	COST
SPEED	1A	\$1.18	\$1.27	\$3.10	0.1634	\$0.51	0.0607	\$0.19	\$0.69	0.1280	\$0.08	
CALLING - 8	2B	\$3.69	\$4.21	\$10.27	0.1634	\$1.68	0.0607	\$0.62	\$2.30	0.0680	\$0.14	
	DMS10	\$0.01	\$0.01	\$0.02	0.1491	\$0.08	0.0269	\$0.00	\$0.00	0.8480	\$0.80	
	5E	\$0.10	\$0.10	\$0.17	0.1491	\$0.03	0.0269	\$0.00	\$0.03	0.7880	\$0.02	
										TOTAL	\$0.25	\$0.02

A	B	C	D	E	F	G	H	I	J	K	L	M
	SCIS	SCIS	1993		ANNUAL	ANNUAL	ANNUAL	ANNUAL	TOTAL			
SERVICE	TECH	MAT'L	MAT'L	INSTAL'D	CPTL.COST	CPTL.COST	MAINT	MAINT	ANNUAL	TECH	ANNUAL	MONTHLY
		INVEST	INVEST	INVEST	FACTOR	(D+E)	FACTOR	COST	COST	MIX	COST	COST
SPEED	1A	\$1.26	\$1.36	\$3.31	0.1634	\$0.54	0.0607	\$0.20	\$0.74	0.1200	\$0.09	
CALLING - 30	2B	\$10.89	\$12.42	\$30.30	0.1634	\$4.95	0.0607	\$1.84	\$6.79	0.0600	\$0.41	
	DMS10	\$0.01	\$0.01	\$0.02	0.1491	\$0.00	0.0269	\$0.00	\$0.00	0.0400	\$0.00	
	5E	\$0.17	\$0.17	\$0.29	0.1491	\$0.04	0.0269	\$0.01	\$0.05	0.7000	\$0.04	
										TOTAL	\$0.54	\$0.04